ACU-RITE®

Instruction Manual

Display for 5-in-1 Weather Sensor

model 1602RX

Package Contents

1. Display unit with tabletop stand
2. Power adapter
3. Instruction Manual

IMPORTANT PRODUCT MUST BE REGISTERED TO RECEIVE WARRANTY SERVICE

PRODUCT REGISTRATION

Register online to receive 1 year warranty protection

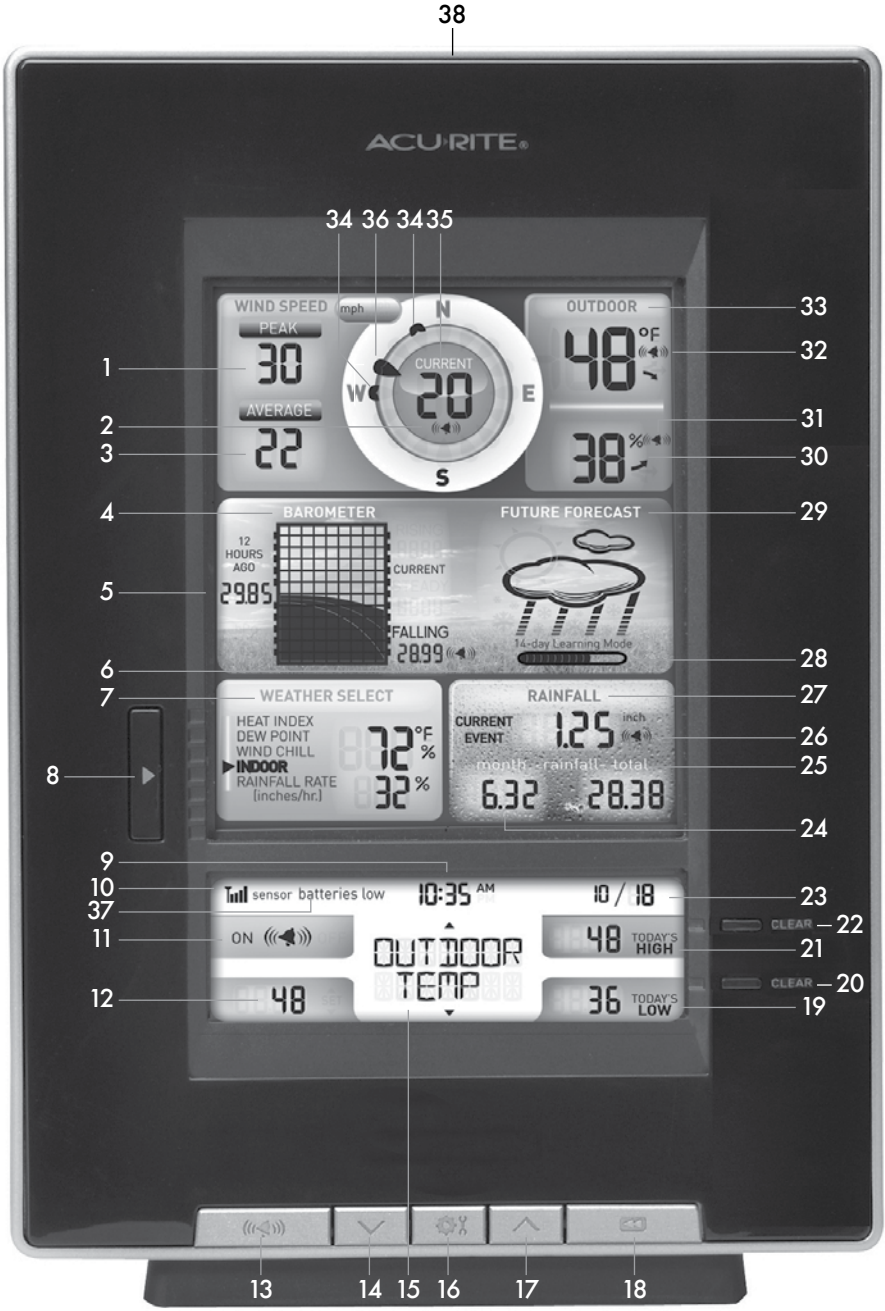
www.**AcuRite**.com

Questions? Contact Customer Support at (877) 221-1252 or visit www.**AcuRite**.com.

SAVE THIS MANUAL FOR FUTURE REFERENCE.

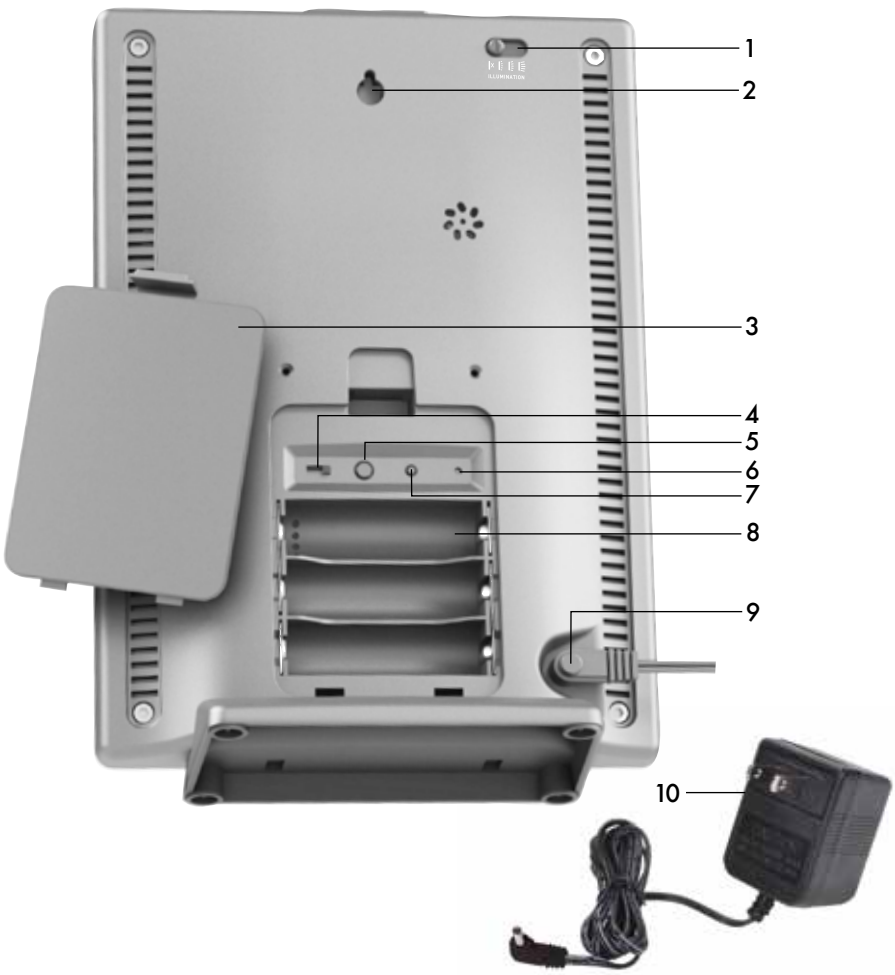
Features & Benefits

Display



1. **Peak Wind Speed**
   Highest speed from past 60 minutes.
2. **Wind Speed Alarm On Indicator**
3. **Average Wind Speed**
   of all speeds from past 2 minutes.
4. **Pressure History Graph**
   Current pressure on right with trend (Rising, Steady or Falling).
5. **Historical Barometric Pressure**
   Pressure reading 12 hours ago.
6. **Storm Alert Alarm On Indicator**
7. **Weather Select**
   Heat index, dew point, wind chill, indoor temperature / humidity, and rainfall rate (inches of rain per hour)
8. **Weather Select Button**
   Press to change the Weather Select category data being displayed.
9. **Clock**
10. **Outdoor Sensor Signal Strength**
11. **Alarm On/Off Indicator**
    for Selectable Category (#15)
12. **Programmable Alarm Setting**
13. **Alarm On/Off Button**
    Activate alarm; press and hold to adjust alarm values.
14. **DOWN Button**
    Press to select Category (shown in #15) and change settings.
15. **Selectable Category**
16. **Settings Button**
17. **UP Button**
    Press to select Category (shown in #15) and change settings.
18. **All-Time Records Button**
    Press for all-time low and date recorded for current category selected on display (#15). Press twice for all-time high and date recorded.
19. **Record Low**
    Shown for current category selected on the display (#15).
20. **Clear Button**
    Deletes record low (#19) shown.
21. **Record High**
    Shown for current category selected on the display (#15).
22. **Clear Button**
    Deletes record high (#21) shown.
23. **Date**
24. **Current Month Total Rainfall**
25. **All-Time Total Rainfall**
26. **Rainfall Alarm On Indicator**
27. **Current Rainfall**
    Accumulates data during rainfall.
28. **Learning Mode Icon**
    Disappears after weather forecast self-calibration is complete.
29. **12 to 24 Hour Weather Forecast**
    Self-Calibrating Forecasting pulls data from your 5-in-1 sensor to generate your personal forecast.
30. **Current Outdoor Humidity**
    Arrow icon indicates the direction the humidity is trending.
31. **Outdoor Humidity Alarm On Indicator**
32. **Outdoor Temperature Alarm On Indicator**
33. **Current Outdoor Temperature**
    Arrow icon indicates direction the temperature is trending.
34. **Previous 2 Wind Directions**
35. **Current Wind Speed**
36. **Current Wind Direction**
37. **Sensor Low Battery Indicator**
38. **Momentary Backlight Button**
    Lights display for 5 seconds (only applicable while on battery power).

Back of Display Unit



BACK OF DISPLAY UNIT

1. **Backlight Dimmer Switch**
   Adjusts display backlight settings: Off, low, medium, high
2. **Integrated Hang Hole**
   for easy wall mounting.
3. **Battery Compartment Cover**
4. **A-B-C Switch**
   ID code that must match 5-in-1 sensor's A-B-C switch to ensure units synchronize.
5. **Clear Today**
   Clears data recorded since 12:00am.
6. **Reset**
   Full reset to factory defaults.
7. **Clear All**
   Clears all data recorded.
8. **Battery Compartment**
9. **Plugin for Power Adapter**
10. **Power Adapter**

Display Unit Setup

The display unit operates with batteries and/or power adapter. Regardless of the power source, it is recommended that batteries always be installed to ensure continuous operation (and retain records) in case of a power outage.

❶ Set the A-B-C Switch

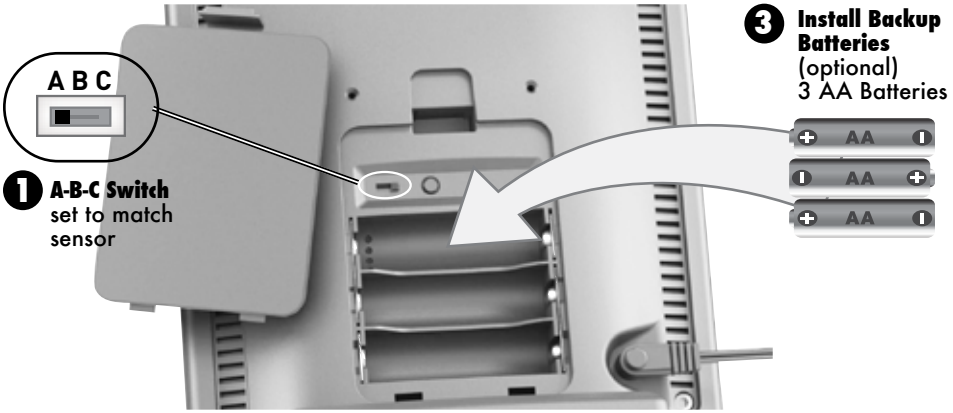
The A-B-C switch is located inside the battery compartment. It can be set to A, B or C. However, you must select the same letter choices for both the sensor and the display unit in order for the units to synchronize.

❷ Plug-in Power Adapter

For the best performance, plug in the power adapter as the main power source for this product.

❸ Install or Replace Backup Batteries (optional)

Insert 3 x AA alkaline batteries into the battery compartment, as shown. Follow the polarity (+/-) diagram in the battery compartment.



IMPORTANT: Batteries are a backup power source to preserve records in the event of a power outage. **Power adapter is recommended as the primary power source to enjoy the full functionality of this product.**

PLEASE DISPOSE OF OLD OR DEFECTIVE BATTERIES IN AN ENVIRONMENTALLY SAFE WAY AND IN ACCORDANCE WITH YOUR LOCAL LAWS AND REGULATIONS.

BATTERY SAFETY: Clean the battery contacts and also those of the device prior to battery installation. Remove batteries from equipment which is not to be used for an extended period of time. Follow the polarity (+/-) diagram in the battery compartment. Promptly remove dead batteries from the device. Dispose of used batteries properly. Only batteries of the same or equivalent type as recommended are to be used. DO NOT incinerate used batteries. DO NOT dispose of batteries in fire, as batteries may explode or leak. DO NOT mix old and new batteries or types of batteries (alkaline/standard). DO NOT use rechargeable batteries. DO NOT recharge non-rechargeable batteries. DO NOT short-circuit the supply terminals.

Set the Time & Date

The clock and calendar are utilized to time stamp history records and other data, so it is important to set the time and date soon after you power on the display unit.

Note: The "⚲" stays in Selectable Categories, even after setup.

Set the Time

1. Press the up or down arrow buttons until "SET CLOCK?" is displayed on the Selectable Category part of the display unit.
2. Press the "⚙" button to set the clock.
3. Press the up or down arrows to adjust the hour. Note the "AM" and "PM" indicators.
4. Press the "⚙" button to confirm hour selection.
5. Press the up or down arrows to adjust minutes.
6. Press the "⚙" button to confirm minute selection.

The clock is now set.

Set the Date

1. Press the up or down arrow buttons until "SET DATE?" is displayed on the Selectable Category part of the display unit.
2. Press the "⚙" button to set the date.
3. Press the up or down arrows to adjust the month.
4. Press the "⚙" button to confirm month selection.
5. Press the up or down arrows to adjust the day.
6. Press the "⚙" button to confirm day selection.
7. Press the up or down arrows to adjust the year.
8. Press the "⚙" button to confirm year selection.

The date is now set.

Select Measurement Units

To select between standard units (mph, °F, etc.) or metric units (kph, °C, etc.):

1. Press the up or down arrow buttons until "SET UNITS?" is displayed on the Selectable Category part of the display unit.
2. Press the "⚙" button to set the unit preference.
3. Press the up or down arrows to select "STAND" for standard or "METRIC" for metric units.
4. Press the "⚙" button to confirm your selection.
5. Next, you will see "WIND MPH". Press the up or down arrows to select MPH, KPH, or KNOTS for wind speed units.
6. Press the "⚙" button to confirm your selection.

Units are now set.

Placement for Maximum Accuracy

AcuRite sensors are sensitive to surrounding environmental conditions. Proper placement of both the display unit and the sensor are critical to the accuracy and performance of this product.

Display Unit Placement

Place the display unit in a dry area free of dirt and dust. To ensure accurate temperature measurement, place out of direct sunlight and away from heat sources or vents. Display unit stands upright for tabletop use or is wall-mountable.

Important Placement Guidelines

Display unit and sensor must be within 330 feet (100 m) of each other.

MAXIMIZE WIRELESS RANGE

Place units away from large metallic items, thick walls, metal surfaces, or other objects that may limit wireless communication.

PREVENT WIRELESS INTERFERENCE

Place both units at least 3 feet (.9 m) away from electronic devices (TV, computer, microwave, radio, etc.).

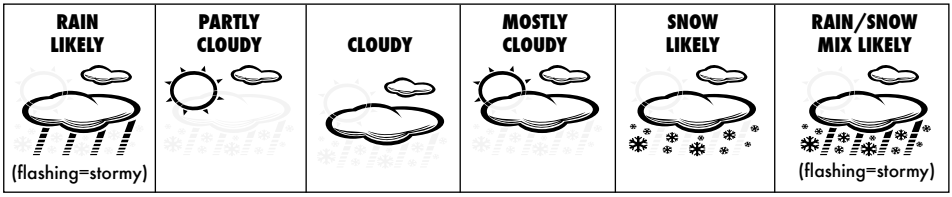
Using the Professional Weather Center

Learning Mode

Self-Calibrating Forecasting use a unique algorithm to analyze changes in pressure over a time period (called Learning Mode) to determine your altitude. After 14 days, the Learning Mode icon disappears from the display screen. At this point, the self-calibrated pressure is tuned in to your location and the unit is ready for superior weather prediction.

Weather Forecast

AcuRite's patented Self-Calibrating Forecasting provides your personal forecast of weather conditions for the next 12 to 24 hours by collecting data from the sensor in your backyard. It generates a forecast with pinpoint accuracy - personalized for your exact location.



View the complete list of icons at www.AcuRite.com/acurite-icons

Barometric Pressure

Subtle variations in barometric pressure greatly affect the weather. This weather forecaster displays the current pressure, direction it's trending (FALLING, STEADY, or RISING) and a pressure chart. The chart tracks and displays the change in pressure so you can monitor the rate of change over time.

Rainfall Event

The rainfall feature tracks rain accumulation over all-time, the current month, and current rainfall event. Current event clears when no rain registers for 8 hours OR no rain registers for 1 hour and pressure rises by .03inhg or more.

Programmable Weather Alarms

Each Selectable Weather Category features an alarm option. When an alarm sounds, the display unit emits an audible beep and flashes the affected category, its alarm settings, and any other relevant data.

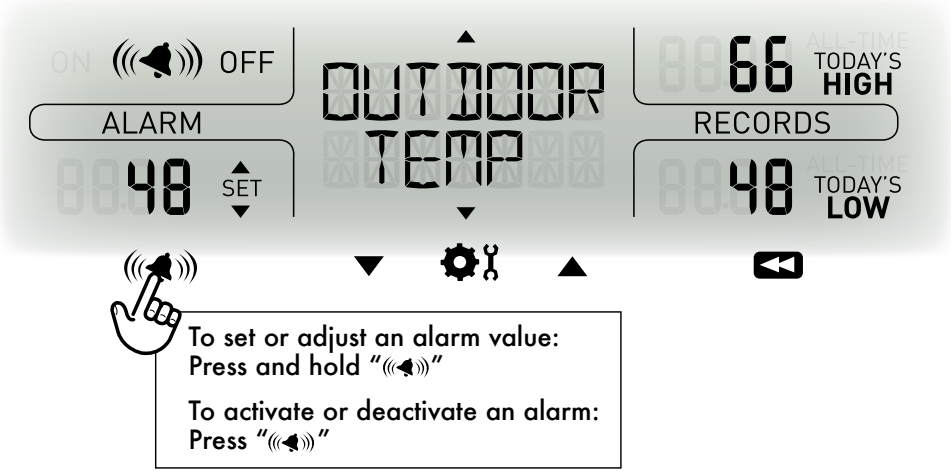
Some alarms can be customized to alert you when your programmed value is reached. Alarms include: outdoor temperature, outdoor humidity, wind speed, heat index, dew point, wind chill, indoor temperature and indoor humidity.

The rain alarm does not require a preset numerical value, but instead sounds as soon as rain is recorded. Similarly, the storm alarm sounds when a large atmospheric pressure drop occurs, which usually indicates an oncoming storm. Note: The storm alarm is NOT intended to be a safety device or warning system.

Set a Weather Alarm

1. Choose the weather category for which you wish to set an alarm by pressing the up or down arrow buttons until the category is displayed on the Selectable Category part of the display unit.
2. To program a value (only applies to alarms that require a value), press AND HOLD the "((◄))" button until the "SET" indicator appears in the area of the display labeled "ALARM" (left of the selected weather category) and the alarm setting flashes.
3. Adjust the alarm value by pressing the up or down arrow buttons.
4. Press the "⚙" button to confirm a value.
5. Next, press the "((◄))" button to activate the alarm. The alarm ON indicator will highlight on the display.

Alarm is now programmed and turned on.



Silence a Sounding Alarm

The alarm sounds initially for a few minutes, then silences itself. The alarm then sounds every few minutes afterwards until one of the following happens:

1. "SNOOZE" - Press any button. Alarm silences, but sounds again if the alarm condition reoccurs.
2. Turn the alarm "OFF" - Deactivates the alarm.

Care & Maintenance

Display Unit Care

Clean with a soft, damp cloth. Do not use caustic cleaners or abrasives. Keep away from dust, dirt and moisture. Clean ventilation ports regularly with a gentle puff of air.

Calibration

Calibrate Temperature & Humidity

The indoor / outdoor temperature and humidity readings can be calibrated on the display unit to improve accuracy. Calibration improves accuracy when 5-in-1 sensor placement or environmental factors impact your data accuracy.

1. Choose the weather category you wish to calibrate by pressing the up or down arrow buttons until the category is displayed on the Selectable Category part of the display unit.
2. Press AND HOLD the up and down arrow buttons and the "⚙" button all at the same time for 15-20 seconds.
   - The display unit beeps, and all display data is hidden except for the value being calibrated.
   - "CAL" (calibrate) and arrows appear next to the value being calibrated.3. Press the up or down arrow buttons to calibrate the data value higher or lower from the actual reading.
4. Press the "⚙" button to confirm the calibration adjustment. Note: The "CAL" icon remains illuminated next to calibrated values.

Specifications

TEMPERATURE RANGE	Outdoor: -40ºF to 158ºF; -40ºC to 70ºC
	Indoor: 32ºF to 122ºF; 0ºC to 50ºC
HUMIDITY RANGE	Outdoor: 1% to 99%
	Indoor: 16% to 98%
WIND SPEED	0 to 99 mph; 0 to 159 kph
WIND DIRECTION INDICATORS	16 points
RAINFALL	0 to 99.99 in; 0 to 9999 mm
WIRELESS RANGE	330 ft / 100 m depending on home construction materials
OPERATING FREQUENCY	433 MHz
POWER	Display: 5v, 100mA power adapter 3 x AA alkaline batteries (optional)
	Sensor: 4 x AA alkaline or lithium batteries
DATA REPORTING	Wind Speed: 18 second updates; Direction: 30 seconds Outdoor temperature & humidity: 36 second updates Indoor temperature & humidity: 60 second updates

If your AcuRite product does not operate properly,
visit www.AcuRite.com or call (877) 221-1252 for assistance.
For more information, visit our Knowledge Base at http://www.AcuRite.com/kbase

FCC Information

This device complies with part 15 of FCC rules. Operation is subject to the following two conditions:
1- This device may NOT cause harmful interference, and
2- This device must accept any interference received, including interference that may cause undesired operation.
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and the receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.
NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.
This device complies with Industry Canada licence-exempt RSS standard(s).
Operation is subject to the following two conditions:
(1) This device may not cause interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation of the device.

Limited One Year Warranty

At AcuRite, we proudly uphold our commitment to quality technology. Chaney Instrument Co. warrants that all products it manufactures to be of good material and workmanship, and to be free of defects when properly installed and operated for a period of one year from the date of purchase.

We recommend that you visit us at www.AcuRite.com for the fastest way to register your product. However, product registration does not eliminate the need to retain your original proof of purchase in order to obtain warranty benefits.

Chaney Instrument Co. warrants that all products it manufactures to be of good material and workmanship, and to be free of defects when properly installed and operated for a period of one year from the date of purchase. Remedy for breach of this warranty is limited to repair or replacement of the defective item(s). Any product which, under normal use and service, is proven to breach the warranty contained herein within ONE YEAR from date of sale will, upon examination by Chaney, and at its sole option, be repaired or replaced by Chaney. Transportation costs and charges for returned goods shall be paid for by the purchaser. Chaney hereby disclaims all responsibility for such transportation costs and charges. This warranty will not be breached, and Chaney will give no credit for products it manufactures which have received normal wear and tear, been damaged (including by acts of nature), tampered, abused, improperly installed, damaged in shipping, or repaired or altered by others than authorized representatives of Chaney.

The above-described warranty is expressly in lieu of all other warranties, express or implied, and all other warranties are hereby expressly disclaimed, including without limitation the implied warranty of merchantability and the implied warranty of fitness for a particular purpose. Chaney expressly disclaims all liability for special, consequential or incidental damages, whether arising in tort or by contract from any breach of this warranty. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you. Chaney further disclaims all liability from personal injury relating to its products to the extent permitted by law. By acceptance of any of Chaney's products, the purchaser assumes all liability for the consequences arising from their use or misuse. No person, firm or corporation is authorized to assume for Chaney any other liability in connection with the sale of its products. Furthermore, no person, firm or corporation is authorized to modify or waive the terms of this paragraph, and the preceding paragraph, unless done in writing and signed by a duly authorized agent of Chaney. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

For in-warranty claims:
Chaney Instrument Co. | 965 Wells St. | Lake Geneva, WI 53147

ACU>RITE®

It's More than Accurate, it's ACU>RITE

AcuRite offers an extensive assortment of precision instruments, designed to provide you with information you can depend on to Plan your day with confidence™.

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